K042936

NOV 26 2004

510(k) SUMMARY OF SAFETYAND EFFECTIVENESS

IV/Catheter Extension Set with NAC Plus Needleless Access Connector and NAC Plus Needleless Access Connector

## Submitted by:

Nanette Hedden Project Manager, Global Regulatory Affairs Baxter Healthcare Corporation Route 120 and Wilson Road Round Lake, IL 60073

### Date Prepared:

November 15, 2004

## **Proposed Device:**

IV/Catheter Extension Set with NAC Plus Needleless Access Connector and NAC Plus Needleless Access Connector

## Comparison Device:

Solution Administration Sets with Luer Access Injection Site and NAC PRN

## **Device Description:**

The IV/Catheter Extension Set with NAC Plus Luer Access Connector constitutes a set for continuous and intermittent fluid delivery into the vascular system. The extension set has luer locks, tubing, slide clamps, tip protectors, and NAC Plus Luer Access Connectors.

The NAC Plus Needleless Access Connector is a Luer activated device cleared under K011193 (Medegen) April 10, 2001. This component is purchased bulk, non-sterile and is packaged by Baxter as both a stand-alone accessory device and as a component integral to IV/Catheter sets. The devices are subsequently packaged, gamma irradiated and distributed to the end user in a cardboard carton.

## Statement of Intended Use:

IV/Catheter Extension Set with NAC Plus Needleless Access Connector is intended to administer drugs and solutions into a patient's vascular system. The NAC Plus (integral or stand-alone) allows the user to administer or withdraw solutions. The NAC Plus Needleless Access Connector may aid in the prevention of needle stick injury and is available as a stand-alone accessory or as part of the IV/Catheter Extension set.

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## **Technological Characteristics**

The IV/Catheter Extension set with NAC Plus Needleless Access Connector functions with similar characteristics to other legally marketed devices such as the Solution Administration Set with Luer Access Injection Site previously cleared under K984060 July 26, 1999. Both are used for solution administration into the vascular system and both are accessed by a standard male luer adapter for fluid administration or fluid withdrawal.

The function of the NAC Plus Needleless Access Connector is similar to that of other legally marketed devices such as the NAC PRN. Sets containing these in-line luer activated injection sites are accessed by a standard male luer adapter to provide needleless access to the fluid path. These in-line injection sites operate with the same mechanism of action. Connection of a male luer adapter to the female luer end of the luer activated injection site accesses a valve that opens the fluid path. There is a difference in the valve mode of operation between the two devices. The NAC Plus uses a collapsible gland that provides a positive fluid displacement feature where a forward pulse of fluid is directed toward the catheter tip as the male luer is removed from the device. The NAC PRN does not have this feature.

#### **Nonclinical Tests**

The biological and chemical reactivity of the materials have been assessed using biological methods specified in ISO Standard 10993-1 and USP physicochemical tests. The material was found to be acceptable for its intended use. Results regarding the functional performance of the proposed NAC Plus have been submitted. The results indicate that the proposed device meets or exceeds all functional requirements.





Food and Drug Administration 9200 Corporate Boulevard Bockville MD 20850

## NOV 2 6 2004

Ms. Nanette Hedden Project Manager, Global Regulatory Affairs Baxter Healthcare Corporation Route 120 and Wilson Road Round Lake, Illinois 60073

Re: K042936

Trade/Device Name: IV/Catheter Extension Set with NAC Plus Needleless

Access Connector

Regulation Number: 880.5440

Regulation Name: Intravascular Administration Set

Regulatory Class: II Product Code: FPA Dated: October 22, 2004 Received: October 25, 2004

## Dear Ms. Hedden:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

Chiu Lin, Ph.D.

Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

# **Indications for Use**

510(k) Number (if known):K042936			
Device Name: IV/Catheter Extension Set with NAC Plus Needleless Access Connector			
and NAC Plus Needleless Access Connector			
Indications For Use:  IV/Catheter Extension Set with NAC Plus Needleless Access Connector is intended to administer drugs and solutions into a patient's vascular system. The NAC Plus (integral or stand-alone) allows the user to administer or withdraw solutions. The NAC Plus Needleless Access Connector, available as a stand-alone accessory or as part of the IV/Catheter Extension set, may aid in the prevention of needlestick injury.			
	and un		
(Division Sign-Off) Division of Anesthesiology, General Hospital, Infection Control, Dental Devices			
510(k) Number: <u>ΚΨ42936</u>			
Prescription Use	_X	AND/OR	Over-The-Counter Use
(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)			
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF			

Concurrence of CDRH, Office of Device Evaluation (ODE)